transmitted from the movable weight **963** through the spring **966** in addition to the counter force of the reciprocation; but the principle of generation of vibration in the oscillatory actuator **950** is based on the use of the oscillatory vibration occurring by a counter force of the reciprocation of the movable weight **963**.

[**0380**] The brake member **964** has a brush **965** in constant contact with the side surface of the movable weight **963**. This brush **965** is so designed as to give a suitable contact resistance to the side surface of the movable weight **963**. Here, the contact resistance given by the brush **965** to the movable weight **963** does not inhibit reciprocation much at all when a drive signal is applied to the coil **962** and the movable weight **963** reciprocates. On the other hand, when application of a drive signal to the coil **962** is stopped, the reciprocation of the movable weight **963** quickly stops due to the above contact resistance.

[**0381**] That is, the brake member **964** acts as a brake for causing the reciprocation of the movable weight **963** to quickly stop when application of a drive signal to the coil **962** is stopped. Note that instead of the brush **965**, it is also possible to use a member formed by sponge, urethane, felt, rubber, and the like.

[**0382**] **FIG. 65** to **FIG. 67** are plan views illustrating examples of placement of the brake member **964** and show the case of viewing the inside of the oscillatory actuator **950** from above the sectional view shown in **FIG. 64**. **FIG. 65** shows an example of placement of three brake members **964***a* around the movable weight **963** at 120 degree intervals. Further, **FIG. 66** shows an example of placement of two brake members **964***b* facing each other across the movable weight **963**. Further, **FIG. 67** shows an example of placement of a single cylindrical brake member **964***c* so as to surround the movable weight **963**.

[**0383**] Here, when for example providing the brake member **964***a* at just one location around the movable weight **963**, the movable weight **963** is subjected to contact resistance from only one direction of contact with the brush **965***a* of the brake member **964***a*. Therefore, the posture of the movable weight **963** collapses at the time of reciprocation, and the vibration generated from the oscillatory actuator **950** fluctuates in direction. Further, even when stopping application of the drive signal, since a contact resistance from the brush **965***a* is applied to the movable weight **963** from one direction, the posture of the movable weight **963** collapses and the reciprocation cannot be stopped quickly. Further, a large deviation in the direction of vibration occurs even when stopping application of the drive signal.

[**0384**] To prevent this from happening, as shown in **FIG. 65** to **FIG. 67**, it becomes necessary to place brake members **964***a* to **964***c* so as to give proportional contact resistance of the brushes **965***a* to **965***c* to the movable weight **963** from around the weight. Further, to keep down wear of the brushes **965***a* to **965***c* due to aging or deformation of the brake members **964***a* to **964***c*, it is effective to make the contact area of the movable weight **963** and the brushes **965***a* to **965***c* as large as possible to an extent not obstructing reciprocation of the movable weight **963**.

[**0385**] With an oscillatory actuator without a brake mechanism for the movable weight **963**, when application of a drive voltage of the period T1 shown in **FIG. 68** is stopped, as shown in **FIG. 69**, the reciprocation of the movable weight **963** does not immediately stop and unnecessary vibration lingers. Therefore, such an oscillatory actuator cannot give the user a "click" or other feeling of operation, where a clear distinction must be exhibited in the strength of vibration in a short time, by vibrational stimulus. Further, at the time same, it is not possible to clearly modulate between vibration and non-vibration.

[**0386**] As opposed to this, according to the first example of the present embodiment, when application of the drive signal shown in **FIG. 68** to the oscillatory actuator **950** is stopped, as shown in **FIG. 70**, the reciprocation of the movable weight **963** is quickly made stopped by the contact resistance of the brake member **964**. Therefore, unnecessary vibration does not linger and a "click" feeling of operation can be given to the user by vibrational stimulus. Further, vibration and non-vibration can be clearly modulated.

[**0387**] [M-2: Second Example]

[**0388**] **FIG. 71** is a sectional view illustrating the internal structure of an oscillatory actuator **951** according to a second example of this embodiment. In this figure, the oscillatory actuator **951** has inside a case **961** a coil **962**, a movable weight **963**, a spring **966**, a brake member **971**, and a brake coil **972**. Note that in the figure, the vibratory member is provided at a position facing the coil **962** across the case **961**. Further, the case **961**, coil **962**, and movable weight **963** are the same as in the first example of the present embodiment, so explanations will be omitted.

[**0389**] The brake member **971** has a brake surface **971***a* covered on its front surface with rubber and a magnet **971***b*. Further, the brake member **971** has attached to it a spring **973** for pulling the brake surface **971** toward the side surface of the movable weight **963**. In the brake member **971**, in the period when a drive signal is not applied to the brake coil **972**, the brake surface **971***a* is pushed against the side surface of the movable weight **963** by the force of the spring **973**. On the other hand, in the period when a drive signal is applied to the brake coil **972**, in the brake member **971**, the magnet **971***b* is pulled toward the brake coil **972**, so the brake surface **971***a* moves away from the side surface of the movable weight **963**. Note that instead of rubber, it is also possible to attach sponge, urethane, felt, a brush, etc. to the front surface of the brake surface **971***a*.

[**0390**] **FIG. 72** is a view illustrating a circuit configuration for applying a drive signal to the coil **962** and the brake coil **972**. In the figure, the oscillator **974** generates a drive signal for driving the coil **962**. An example of the waveform of the drive signal generated by this oscillator **974** is shown in **FIG. 73**. The movable weight **963** reciprocates by the application of the alternating current waveform shown in the figure to the coil **962**. Further, the brake control circuit **975** generates a drive signal to be applied to the brake coil **972**. This brake control circuit **975** monitors the drive signal generated from the oscillator **974** and outputs a drive signal of a square wave to the brake coil **972** for exactly the period T2 during which the drive signal is generated by the oscillator **974**.

[**0391**] Therefore, in the period when the oscillator **974** applies a drive signal to the coil **962**, a drive signal is applied from the brake control circuit **975** to the brake coil **972**, so the brake surface **971***a* of the brake member **971** moves